CEREAL RUST BULLETIN

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From:

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(In cooperation with the Minnesota Agricultural Experiment Station)

The small grain harvest is underway from southern Georgia to southwestern Oklahoma. Generally, the hard red winter wheat crop remains in poor condition because of drought conditions throughout Texas, Oklahoma, Kansas and eastern Colorado. In the northern spring grain-growing area, cool wet weather has slowed planting and plant growth development is 2-3 weeks behind normal in many areas.

Wheat stem rust. In early May, 2-5% wheat stem rust severities were observed in nurseries and two fields in southern Louisiana.

Wheat leaf rust. During the third week in May, traces of leaf rust were found in a few fields in east central Kansas (Fig. 1) while no rust was found in south central Kansas and north central Oklahoma. In this area, leaf rust development was minimal because rust did not overwinter and no rust inoculum arrived from areas farther south where drought conditions existed.

In mid-May, traces of leaf rust were reported in nurseries from east central North Carolina to east central Arkansas. The wheat in these plots was infected from rust that had overwintered in their areas. By mid-May, ten percent leaf rust severities were reported in some fields in southern Mississippi and southern Louisiana.

By the first week in May, 60% leaf rust severities were reported on wheat cultivars growing in nurseries and in some fields in the Sacramento Valley in California. Generally, fields in the Sacramento Valley had moderate severity leaf rust.

During the third week in May, leaf rust was found throughout the state of Washington and in the Columbia basin, 40% severities were reported on susceptible nursery cultivars. The leaf rust that was found in the Pacific Northwest was more severe than normal for this time of the year.

Wheat stripe rust. During early May, traces of wheat stripe rust were found in wheat fields in the Sacramento Valley in California.

By the third week in May, stripe rust was widespread throughout the Pacific Northwest and increasing to epidemic levels on susceptible cultivars. The moist cool conditions this spring have been ideal for rust development. Throughout the Pacific Northwest many wheat growers have been spraying to control rust.

Oat stem rust. In mid-May, trace to 80% stem rust severities were observed on oat cultivars in southern Louisiana nursery plots.

In early May, 30% rust severities were found on oats growing in plots and traces on wild oats in the Sacramento Valley in California.

Oat crown rust. During mid-May, light to moderate numbers of aecial infections were found on buckthorns growing in south central Wisconsin. Buckthorns are the alternate hosts for crown rust and generally provide the initial spores for crown rust infection of the northern oat crop. At St. Paul, Minnesota, light aecial infections began to appear during the third week of May.

Barley stem rust. As of May 28, no barley stem rust has been reported in the U.S. this year. Limited amounts of barley are grown commercially in the southern states. Stem rust on barley rarely occurs in this area.

Barley leaf rust. There have been no new reports of barley leaf rust since Bulletin 1.

Barley stripe rust. In mid-May, severe barley stripe rust was reported in experimental plots on the western side of the Cascades in Washington (Fig.2). In fields in eastern Washington moderate levels of barley stripe rust were found.

Rye rusts. There have been no new reports of rye rusts since the last bulletin.

Stem rust on Barberry. During mid-May, aecial development was observed on barberry bushes (alternate host for stem rust) in central Wisconsin.